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REMARKS

In response to the Office Action, the cited references have been reviewed, and the rejections and objections made to the claims by the Examiner have been considered. The claims presently on file in the present application are believed to be patentably distinguishable over the cited references, and therefore allowance of these claims is earnestly solicited.

In order to render the claims more clear and definite, and to emphasize the patentable novelty thereof, claims 1 and 21-26 have been amended, and new claims 39-44 have been added. Support for any claim amendments and new claims is found in the specification, claims, and drawings as originally filed, and no new matter has been added. Accordingly, all claims presently on file in the subject application are in condition for immediate allowance, and such action is respectfully requested.

Rejections**Rejection Under 35 USC §102**

Claims 29-30 and 34-37 have been rejected under 35 USC §102(e), as being anticipated by U.S. patent 6,266,493 to Farrell et al. ("Farrell '493"). Applicants respectfully traverse the rejection and request reconsideration.

As to a rejection under §102, "[a]nticipation is established only when a single prior art reference discloses expressly or under the principles of inherence, each and every element of the claimed invention." RCA Corp. v. Applied Digital Data Systems, Inc., (1984, CAFC) 221 U.S.P.Q. 385. The standard for lack of novelty, that is for "anticipation," is one of strict identity. To anticipate a claim, a patent or a single prior art reference must contain all of the essential elements of the particular claims. Schroeder v. Owens-Corning Fiberglass Corp., 514 F.2d 901, 185 U.S.P.Q. 723 (9th Cir. 1975); and Cool-Fin Elecs. Corp. v. International Elec. Research Corp., 491 F.2d 660, 180 U.S.P.Q. 481 (9th Cir. 1974). The identical invention must be shown

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in as complete detail as is contained in the claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

A. Claims 29-30 and 34-35 were improperly rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 6,266,493 to Farrell et al. ("Farrell '493").

Applicants contend that claims 29-30 and 34-35 were improperly rejected because the single cited reference does not disclose all of the essential elements of the claims arranged as required by the claims and in as complete detail as in the claims.

1. The Farrell '493 reference does not disclose all the limitations of Applicants' independent claim 29 in that the limitations of "providing printer parameters indicative of resources of a predetermined printer including an available amount of consumables" and "making a determination at the second computer whether sufficient consumables exist to print the print job" is absent from the reference.

Independent claim 29 recites:

"29. (Previously presented) A method for estimating consumables requirements for a print job, comprising:

providing printer parameters indicative of resources of a predetermined printer including an available amount of consumables;

originating the print job at a first computer at a first network node;

communicating the print job to a second computer at a second network node;

at the second computer, analyzing the print job to determine print job parameters that affect a required amount of the consumables;

based on the print job parameters, estimating at the second computer the required amount of the consumables required to print the print job;

based on the printer parameters and the required amount of the consumables, making a determination at the second computer whether sufficient consumables exist to print the print job;
and

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communicating the determination from the second computer to the first computer.”
(emphasis added)

The Farrell ‘493 reference is directed to a

“printing machine that records information about resources expended to carry out a printing request. ... Subsequently, before carrying out another printing request, the printing machine uses the recorded information to make a prediction or estimate of resources required to carry out the printing request” (Abstract; emphasis added).

The Office states that the Farrell ‘493 reference discloses the limitations recited in claim 29 of “providing printer parameters indicative of resources of a predetermined printer including an available amount of consumables”, and “based on the printer parameters and the required amount of the consumables, making a determination at the second computer whether sufficient consumables exist to print the print job” (Office Action, p.3,4; emphasis added). Applicants respectfully disagree.

In order to determine whether sufficient consumables exist to print the print job, two different types of information are required. First, the consumable resources (such as ink, toner, print media, etc.) that are required to print the print job must be determined. As recited in claim 29, the print job is analyzed at the second computer to determine print job parameters that affect a required amount of the consumables, and then, based on the print job parameters, the required amount of the consumables required to print the print job is estimated at the second computer. Second, the amount of the consumable resources that are available to print the print job must be ascertained. As recited in claim 29, printer parameters indicative of resources of a predetermined printer, including an available amount of consumables, are provided. Finally, determining whether or not sufficient consumable resources exist to print the print job requires determining whether the available amount of consumable resources exceeds the required amount of consumable resources.

While the Farrell ‘493 reference may, arguendo, disclose estimating the consumable resources required to print the print job, it clearly does not disclose providing printer parameters indicative of resources including an available amount of consumables which are necessary for the

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consumable sufficiency. With regard to the limitation of providing such printer parameters, the Examiner states that “database 24 includes records 50 that contain data useful to estimate consumables required, col. 4, lines 5-17” (Office Action, p.3; emphasis added). The Examiner further argues that

“Farrell ‘493 teaches ... at column 4, lines 5-17 where a database 24 provides information (parameters) containing data about previous printing activity such as print job tickets and print instructions. Estimator 10 uses these records selected by the database reader 8 to estimate or predict the amount of consumables necessary to print a future job. In addition, estimator 10 can let the user know if the available resources are not adequate to complete a print request se[e] column 6, lines 11-18. This reduces operator uncertainty of adequate consumables to complete a print job, column 6, lines 42-46. As a result, an operator does not have to overstock a printer with excessive consumables, column 6, lines 45-46” (Office Action, p.3, p.4; emphasis in original).

Applicants disagree with the Examiner’s characterization. Nothing in the cited portions of the reference discloses that an available amount of consumables of a predetermined printer is provided, or that a determination is made at a second computer as to whether sufficient consumables exist to print the print job. The Farrell ‘493 reference discloses that estimator 10 implements an “estimation process 9 that uses a record, selected by database reader 8, to estimate, or predict, consumable resources required to print a future job” (col. 4, lines 10-13). However, the Farrell ‘493 reference is silent as to ascertaining the available amount of consumables (for example, in a particular printer or printing system) that are available for use in printing the print job. Because the estimation process 9 of estimator 10 of the Farrell ‘493 reference does not know the available amount of consumables, it cannot make a determination as to whether sufficient consumables exist to print the print job. In addition, Applicants respectfully believe that the Examiner mischaracterizes the teachings of the reference, because the estimator 10 does not “let the user know if the available resources are not adequate to complete a print request” as contended by the Examiner (Office Action, p.3, p.4). The reference teaches as follows:

“During a production run after a prediction for the run, if estimator 10 determines whether it appears that the actual usage will exceed the predicted usage. If it appear[s] that the

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actual usage will exceed the predicted usage, estimator 10 notifies an operator is notified of a potential consumable shortage.” (col. 6, ln. 10-15; emphasis added)

Thus, during a production run after a prediction for the run, the operator will be notified by the estimator 10 if it turns out that the estimator 10 happened to underestimate the amount of consumables required to print the production run. However, there is no disclosure that this notification to the operator is based on any insufficiency of the consumable resources that are available to the printer for use in printing the print job. More specifically, nothing in this or any other portion of the reference discloses providing any printer parameters that are indicative of an available amount of consumables, nor of making a determination as to whether sufficient consumables exist to print the print job based at least in part on these printer parameters, as recited in claim 29.

With regard to reducing uncertainty of adequate consumables to complete a print job, the reference discloses:

“Thus, a presently preferred printing machine records information about resources expended to carry out a printing request. The recorded resource information may include quantities of particular paper types and colored toner needed to satisfy the printing request. Subsequently, before carrying out another printing request, the printing machine uses the recorded information to make a prediction or estimate of resources required to carry out the printing request. The printing machine thus reduces uncertainty about whether there are sufficient resources to satisfy the next request, and alleviates the burden of maintaining excessive consumables in inventory.” (col. 6, ln. 35-46)

The Farrell ‘493 reference teaches nothing more than that, by using historical information about resources expended to print prior printing requests, a prediction or estimate of the resources required to carry out a subsequent printing request reduces uncertainty about whether there are sufficient resources to satisfy the next request. Reducing uncertainty about resources required to print a print job is not the same as determining whether or not sufficient resources exist to print the print job. If uncertainty is reduced from a very high level to merely a high level, or even to a moderate level, one is still not able to determine whether sufficient resources to print the print job exist.

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In addition, the Farrell '493 discloses nothing in terms of how uncertainty is reduced. For example, it could be nothing more than the user knowing that it's been a long time since the ink supply has been replenished and that a lot of print jobs have been printed using the ink supply, and so if the user is then presented with an estimate that a large amount of consumable resources will be needed to print an upcoming print job, the user realizes that he should replenish the ink supply to reduce his uncertainty as to whether there are sufficient resources to print the next job. Such is completely different from the estimator 10 having access to printer parameters including an available amount of consumables so that it can make a determination whether sufficient resources exist to print the upcoming print job, as recited by claim 29.

Accordingly, the novel features of the present invention are not anticipated by the Farrell '493 reference in that the above-discussed essential elements, arranged as required by the claims and recited in as complete detail as in the claim, are absent from the reference. Therefore, the rejection is improper at least for that reason and should be withdrawn.

B. Claims 36-37 were improperly rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 6,266,493 to Farrell et al. ("Farrell '493").

Applicants contend that claims 36-37 were improperly rejected because the single cited reference does not disclose all of the essential elements of the claims arranged as required by the claims and in as complete detail as in the claims.

1. The rejection of dependent claims 36-37 is improper for the same reasons that render the rejection of its base claim 29 improper.

"A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." (35 U.S.C. §112, paragraph 4.)

Claims 36-37 depend from base claim 29, which was rejected under 102(c) based on the Farrell '493 reference. Applicants have presented heretofore the reasons why the rejection of base claim 29 is improper. Because the rejection of base claim 29 is improper, the rejection of its

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dependent claims 36-37 is also improper for at least the same reasons.

2. The Farrell '493 reference does not disclose all the limitations of Applicants' dependent claims 36-37 in that the limitation of an "alternative printer" is absent from the references.

With regard to an alternative printer, claim 36 recites:

"36. (Previously presented) The method of claim 29, comprising:
identifying at the second computer at least one alternative printer having sufficient consumables to print the print job, and communicating the identity of the at least one alternative printer to the first computer." (emphasis added)

With regard to alternative printers, claim 37 recites:

"37. (Previously presented) The method of claim 36, comprising:
at the first computer, selecting one of the alternative printers and sending the print job from the first computer to the alternative printer." (emphasis added)

In rejecting claim 36, the Examiner states that

"the printers located on the network of figure 1 can all be considered alternative printers. It is inherent that if a user is not satisfied with the estimation results of a desired printer 2 or if a printer 2 is inactive, the user can decide to print at another printer 2 whereby estimator 10 (second computer) can certainly notify the user of cost metrics for an alternative printer 2 located on the network. Estimator 10 can certainly predict costs for any and all printers 2 connected to the network of figure 1. It is also inherent that the estimator 10 (second computer) can also notify the user of the alternative printer 2's predicted cost, in addition to the alternate printer 2's identity of the user interface 12 (first computer) or else the user would not know where the print job will be printed." (Office Action, p.5; emphasis added).

Applicants disagree. Even assuming, arguendo, that the Examiner's assertion above is correct, such alleged operation fails to disclose all the limitations of claim 36. It is not pertinent whether the estimator 10 can provide cost estimates for alternative printers. There is no disclosure in the Farrell '493 reference that the estimator 10, or any other element, identifies an alternative printer (i.e. a printer different from the predetermined printer) on which to print the print job. The Examiner merely states that "the user can decide to print at another printer 2 whereby estimator 10 can certainly notify the user of cost metrics 2 for an alternative printer"

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(Office Action, p.5; emphasis added). Thus it is the user, not estimator 10 nor any other element of the second computer, that identifies the alternative printer and communicates the identity of the alternative printer to the first computer. This is contrary to the requirements of claim 36.

In addition, for similar reasons as have been discussed heretofore with regard to claim 29, the reference does not disclose the second computer determining whether any printer has sufficient consumables to print the print job.

With regard to the rejection of claim 37, it follows that, if no alternative printer is identified, no alternative printer can be selected, or have a print job sent to it, as recited in claim 37.

Accordingly, the novel features of the present invention are not anticipated by the Farrell '493 reference in that the above-discussed essential elements, arranged as required by the claims and recited in as complete detail as in the claim, are absent from the reference. Therefore, the rejection is improper at least for that reason and should be withdrawn.

Rejection Under 35USC §103

Claims 1-2, 6-9, 21-22, and 26-28 have been rejected under 35 USC §103(a), as being unpatentable over U.S. patent 5,383,129 to Farrell et al. ("Farrell '129") in view of U.S. patent 6,356,359 to Motamed ("Motamed"). Applicants respectfully traverse the rejection and request reconsideration.

As to a rejection under §103(a), the U.S. Patent and Trademark Office ("USPTO") has the burden under §103 to establish a *prima facie* case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. See *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Manual of Patent Examining Procedure (MPEP) section 2143 discusses the requirements of a *prima facie* case for obviousness. That section provides as follows:

To establish a *prima facie* case of obviousness, three basic criteria

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must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must be found in the prior art, and not based on applicant's disclosure.

More recently, the Supreme Court, quoting *In Re Kahn*, 441 F.3d, 977, 988 (CA Fed. 2006), has clarified that "[R]jections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" *Teleflex Inc. v. KSR Int'l Co.*, 82 USPQ2d 1385, 1396 (S.Ct. 2007).

A. Claims 1-2, 6-9, 21-22, and 26-28 were improperly rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,383,129 to Farrell et al. ("Farrell '129") in view of U.S. Patent No. 6,356,359 to Motamed ("Motamed").

Applicants contend that claims 1-2, 6-9, 21-22, and 26-28 were improperly rejected because (1) the applied references, alone or in combination, do not teach or suggest all of Applicants' claim limitations; and (2) there is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Such could be possible only in hindsight and in light of Applicants' teachings.

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1. The Farrell '129 and Motamed references, alone or in combination, do not teach or suggest all the limitations of Applicants' independent claims 1 and 21 in that the limitation of "offering pricing and estimation of ink and image consumables for completing the print job using a plurality of different printers including the computer peripheral device before the print job is printed" is absent from the references.

Independent claim 1 recites:

"1. (Currently amended) A method for estimating image consumables usage of a print job, comprising:
connecting a computer peripheral device to a host computer having predefined information relating to the peripheral device; and
offering to a user pricing and estimation of image consumables required for completing the print job using ones of a plurality of different printers including the computer peripheral device having sufficient image consumables to print the print job, before the print job is printed." (emphasis added)

Independent claim 21 recites:

"21. (Currently amended) A monitoring system for estimating image consumables usage of a print job, comprising:
means for connecting a computer peripheral device to a host computer having predefined information relating to the peripheral device; and
means for offering to a user pricing and estimation of image consumables required for completing the print job using ones of a plurality of different printers including the computer peripheral device having sufficient image consumables to print the print job, before the print job is printed." (emphasis added)

Claims 1 and 21 have been amended to recite the limitation of offering pricing and estimation of image consumables required for completing the print job using ones of a plurality of different printers including the computer peripheral device having sufficient image consumables to print the print job, before the print job is printed.

The Farrell '129 reference may, arguendo, teach offering pricing and estimation of image consumables required for completing a print job, but does not teach or suggest doing so for printers including the computer peripheral device having sufficient image consumables to print

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the print job, as recited in the claims.

The Motamed reference discloses the existence of a plurality of printers 90a, 90b, 90n (Figs. 10-11), it does not teach or suggest offering pricing and estimation of image consumables required for completing a print job using printers including the computer peripheral device having sufficient image consumables to print the print job, as recited in the claims.

Therefore, the features of the present invention are neither disclosed nor suggested by the cited references in combination at least in that the combined references do not teach such limitations.

Applicants prospectively note that combining the Farrell '493 reference with the Farrell '129 and Motamed references would still fail to teach or suggest the limitation of offering pricing and estimation of image consumables required for completing a print job using printers including the computer peripheral device having sufficient image consumables to print the print job, for similar reasons as have been explained heretofore with reference to claim 29.

2. There is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness in that the Motamed reference contradicts the reason provided by the Examiner.

As the articulated reasoning to support the conclusion of obviousness, the Examiner states:

"Motamed 6,356,359 makes reference to the primary Farrell '129 reference at column 1, lines 40-54. Therefore, Motamed, in the same field of endeavor, had access to the teachings of Farrell in order to improve upon and modify Farrell's printing/cost estimation prior art disclosure to reflect using more than one printer. The motivation for doing so would be to improve the capability of estimation for a plurality of machines" (Office Action, p.8).

However, this conclusory statement of generalized advantages is too vague and not specific enough to serve as a proper motivation for combining the references. Furthermore, the Motamed reference contradicts this reasoning by teaching:

"M. Farrell, Method of Estimating Cost of Printing Materials Used to Print a Job on a Printing Apparatus, U.S. Pat. No. 5,383,129 (Jan. 17, 1995) discloses a method of estimating the cost of printing materials used to print a job on a printing apparatus ... While Farrell discloses

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print cost estimation methods based on a number of stored billing rates and materials costs, he fails to disclose a system for estimating the cost of toner for each job based upon the image file bit map."

There is no disclosure of improving the capability of estimation for a plurality of machines. Therefore, the reason provided by the Examiner lacks the articulated reasoning with some rational underpinning that is required to support the legal conclusion of obviousness. Any motivation to combine must impermissibly use the Applicants' disclosure as a blueprint or in hindsight.

Claims 10-14 have been rejected under 35 USC §103(a), as being unpatentable over Hitachi Koki Imaging Solutions, Inc. (Office World News; Oct. 2000; vol. 28., issue 10; pgs. 30-31) ("HiKIS") in view of U.S. patent 6,266,493 to Farrell et al. ("Farrell '493").

A. Claims 10-14 were improperly rejected under 35 U.S.C. §103(a) as being unpatentable over Hitachi Koki Imaging Solutions, Inc. (Office World News; Oct. 2000; vol. 28., issue 10; pgs. 30-31) ("HiKIS") in view of U.S. patent 6,266,493 to Farrell et al. ("Farrell '493").

Applicants contend that claims 10-14 were improperly rejected because (1) the applied references, alone or in combination, do not teach or suggest all of Applicants' claim limitations; and (2) there is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Such could be possible only in hindsight and in light of Applicants' teachings.

1. The cited references, alone or in combination, do not teach or suggest all the limitations of Applicants' independent claim 10 in that the limitations of "communicating a type of ink cartridge and ink reservoir system to a host computer as part of a print job submission", and "determining the number of print swaths and pages the ink cartridge can complete based on ink

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available in the ink reservoir system", are absent from the references.

Independent claim 10 recites:

"10. (Original) A method for analyzing ink usage for a printer, comprising:
communicating a type of ink cartridge and ink reservoir system to a host computer as part of a print job submission;
estimating the ink to be used in a print job based on predefined printing requirements; and
determining the number of print swaths and pages the ink cartridge can complete based on ink available in the ink reservoir system." (emphasis added)

Applicants disagree with the Examiner's assertion that the HiKIS and Farrell '493 references, taken in combination, teach or suggest all the limitations of claim 1. More specifically, the cited references do not teach and suggest the limitation of "communicating a type of ink cartridge and ink reservoir system to a host computer as part of a print job submission".

With regard to this first limitation, the Examiner contends that "i-manage allows customers/users of a printing machine to check a printer's equipment including consumables such as an ink cartridge, para. 4" (Office Action, p.10). To whatever extent this may be true, however, there is no teaching or suggestion that such an equipment check is performed as part of a print job submission. Rather, it is performed using an i-manage software module supplied by Hitachi, which is a module that "provides comprehensive remote device management to allow dealers and customers to check a copier/printer's status, including ... extensive usage statistics including page counts by media size and consumable usage" (HiKIS, para. 4). As such, the i-manage software module is a diagnostic and service tool. There is no disclosure of any aspect of i-manage that is associated with printing individual print jobs. Accordingly, to whatever extent the HiKIS reference teaches communicating a type of ink cartridge and ink reservoir system to a host computer, it does not teach that such communication is performed as part of a print job submission.

The Examiner further contends:

"HiKIS teaches that a user can determine and remotely predict from the user's computer

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desk, when consumables will need replenishment to proactively determine when components of the copier will need replacement, see paragraph 6, page 30-31. The HiKIS copier/printer is programmed to send out identification information about consumables replenishment (reads on ink cartridge and ink reservoir system) automatically so that customer service replacement is more efficient, see paragraph 6. This information can certainly be sent with a print job by an operator desiring customer service using the i-service module of paragraph 5 and paragraph 6” (Office Action, p.10-11; emphasis added).

Applicants disagree. With regard to the i-service module, the HiKis reference teaches that:

“The technician can also program the copier/printer to send early warning notifications for PMs and consumables replenishment via a page or email, without user interaction” (para. 6).

As explained above, the notifications regarding consumables are sent via a page or email; there is no teaching in the references, alone or in combination, that these notifications are communicated “as part of a print job submission”, as recited in claim 10. The Examiner provides no support for his assertion that identification information about consumables replenishment can be sent with a print job by an operator desiring customer service using the i-service module. The cited references, in combination, do not teach or suggest this. The only teaching that a type of ink cartridge and ink reservoir system are communicated to a host computer as part of a print job submission comes from Applicants’ claimed invention. Using the teachings of Applicants’ claims or specification to fill in gaps in the teachings of the prior art references would constitute impermissible hindsight.

In addition, the HiKIS reference teaches that the notifications regarding consumables are sent without user interaction. This is contrary to claim 10, which recites that the type of ink cartridge and ink reservoir system are communicated to the host computer as part of a print job submission, which constitutes user interaction.

Furthermore, for similar reasons as explained heretofore with reference to claim 29, the Farrell ‘493 reference does not disclose communicating a type of ink cartridge and ink reservoir system to a host computer at all, much less as part of a print job submission.

In addition, the cited references do not teach or suggest the limitation of “determining the

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number of print swaths and pages the ink cartridge can complete based on ink available in the ink reservoir system". With regard to this second limitation, the Examiner admits that "HiKIS does not disclose ... determining the number of print swaths and pages the ink cartridge can complete based on ink available in the ink reservoir system" (Office Action, p.11). However, the Examiner contends that the Farrell '493 reference "teaches that the system can make a prediction/estimate of resources (ink and pages are resources) required to carry out a print request" (Office Action, p.10; emphasis added). To whatever extent, if any, that the Examiner's contention is correct, the resources required to carry out a print request are different from the resources (i.e ink.) available in the ink reservoir system to carry out the print request. The resources available may be more or less than the resources required, and if the resources available are less than the resources required, the print request cannot be carried out without replenishing the resources. For similar reasons as discussed heretofore with regard to claim 29, the Farrell '493 reference does not disclose determining the number of print swaths and pages the ink cartridge can complete based on ink available in the ink reservoir system, as recited in claim 10.

Therefore, the features of the present invention are neither disclosed nor suggested by the HiKIS reference in combination with the Farrell '493 reference at least in that the combined references do not teach the limitations of "communicating a type of ink cartridge and ink reservoir system to a host computer as part of a print job submission" and "determining the number of print swaths and pages the ink cartridge can complete based on ink available in the ink reservoir system".

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2. There is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness in that estimating the consumable quantities required to print a particular print job, as taught by the Farrell '493 reference, is unrelated to the monitoring function provided by the i-manage software of the HiKIS reference.

In addition, the Office has not established a *prima facie* case of obviousness at least because there is no articulated reasoning with some rational underpinning to modify the reference or to combine reference teachings. The Office states that the motivation is "to estimate quantities prior to executing print jobs" (Office Action, p.11). Applicants respectfully believe that the stated motivation is merely a conclusory statement of generalized features and advantages which is too vague and not specific enough to ascertain a motivation for combining the references. As argued heretofore, the i-manage module of the HiKIS reference is not directed to estimation of the consumables needed for a particular print job, or even to individual print jobs at all. Rather, the i-manage module provides a mechanism for remote device monitoring and management of copiers and printers. For example, a user may monitor consumables usage via the i-manage module, and then place a sales request for more consumables through the i-manage module at the appropriate time.

The Farrell '493 reference does not aid in the objectives of the HiKIS reference. Also as argued heretofore with regard to claim 29, the Farrell '493 reference is directed merely to estimating the amount of consumables required to print a print job; it does not disclose ascertaining the amount of consumables available on a particular printer to print the print job, or determining whether the available amount of consumables is sufficient to print the print job. No linkage between required consumables and available consumables is taught or suggested by the HiKIS and Farrell '493 references; such is taught only by Applicants' disclosure. Therefore, a valid suggestion or motivation to combine is absent from the cited references. Any motivation to combine impermissibly uses Applicants' disclosure as a blueprint or in hindsight.

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Claims 3-5 and 23-25 have been rejected under 35 USC §103(a), as being unpatentable over U.S. patent 5,383,129 to Farrell et al. ("Farrell '129") in view of U.S. patent 6,757,070 to Lin et al. ("Lin").

A. Claims 3-5 and 23-25 were improperly rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,383,129 to Farrell et al. ("Farrell '129") in view of U.S. Patent No. 6,356,359 to Motamed ("Motamed") and further in view of U.S. patent 6,757,070 to Lin et al. ("Lin").

1. The rejection of dependent claims 3-5 and 23-25 is improper for the same reasons that render the rejection of their base claims 1 or 21 improper.

Claims 3-5 and 23-25 depend from one of base claim 1 or 21, which have been rejected under §103(a) based on the Farrell '129 and Motamed references. The Lin reference was not cited in the rejection of claims 1 or 21.

Applicants have presented heretofore the reasons why the rejection of base claims 1 and 21 is improper. Because the rejection of these base claims is improper, the rejection of their dependent claims 3-5 and 23-25 is also improper for at least the same reasons.

2. There is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness in that the Farrell '129 reference is not from the problem solving area of drivers, or alternatively the Farrell '129 does not require the teachings of the Lin reference in order to access a suitable driver.

The Examiner states that the Farrell '129 reference and the Lin reference are analogous art because they are from the similar problem solving area of "connecting remote drivers" or "obtaining driver information", and that the motivation for combining these references is "to access a suitable print driver" (Office Action, p.12-13). Applicants disagree. The Farrell '129 reference is not from the problem solving area of connecting remote drivers or obtaining driver information; in

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fact, there is no mention of drivers in the Farrell '129 reference at all. Rather, the Farrell '129 reference is from the problem solving area of "estimating cost of printing materials used to print a job on a printing apparatus" (Abstract). Even if, arguendo, the Farrell '129 reference may somehow be considered to inherently be directed to drivers because of the interactions that occur between controller 7 and printer 8 (Fig. 2) in printing a print job, the alleged motivation for combining the references provided by the Examiner is absent. Since the Farrell '129 reference discloses printing the print job, it would have to be inherently capable of accessing a suitable print driver without requiring combining in the teachings of the Lin reference. Furthermore, controller 7 and printer 8 are part of self-contained laser based printing system 2 (Fig. 1). As such, there would be no need for controller 7 to connect to a remote driver for printing on printer 8.

Therefore, the reason provided by the Examiner lacks the articulated reasoning with some rational underpinning that is required to support the legal conclusion of obviousness. Any motivation or suggestion to combine reference teachings impermissibly uses the Applicants' disclosure as a blueprint or in hindsight for the rejection.

Claim 33 has been rejected under 35 USC §103(a), as being unpatentable over U.S. patent 6,266,493 to Farrell et al. ("Farrell '493") in view of Hitachi Koki Imaging Solutions, Inc. (Office World News; Oct. 2000; vol. 28., issue 10; pgs. 30-31) ("HiKIS").

A. Claim 33 was improperly rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,266,493 to Farrell et al. ("Farrell '493") in view of Hitachi Koki Imaging Solutions, Inc. (Office World News; Oct. 2000; vol. 28., issue 10; pgs. 30-31) ("HiKIS").

1. The rejection of dependent claim 33 is improper for the same reasons that render the rejection of its base claim 29 improper.

Claim 33 depends from base claim 29, which was rejected under 102(e) based solely on

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the Farrell '493 reference. The HiKIS reference was not cited in the rejection of claim 29.

Applicants have presented heretofore the reasons why the rejection of base claim 29 is improper. Because the rejection of base claim 29 is improper, the rejection of its dependent claim 33 is also improper for at least the same reasons.

Claims 31-32 have been rejected under 35 USC §103(a), as being unpatentable over U.S. patent 6,266,493 to Farrell et al. ("Farrell '493") in view of U.S. patent 6,580,524 to Weichmann et al. ("Weichmann").

A. Claim 31 was improperly rejected under 35 USC §103(a), as being unpatentable over U.S. patent 6,266,493 to Farrell et al. ("Farrell '493") in view of U.S. patent 6,580,524 to Weichmann et al. ("Weichmann").

1. The rejection of dependent claim 31 is improper for the same reasons that render the rejection of its base claim 29 improper.

Claim 31 depends from base claim 29, which was rejected under 102(e) based on the Farrell '493 reference. The Weichmann reference was not cited in the rejection of claim 29.

Applicants have presented heretofore the reasons why the rejection of base claim 29 is improper. Because the rejection of base claim 29 is improper, the rejection of its dependent claim 31 is also improper for at least the same reasons.

2. There is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness in that combining in the teachings of the Weichmann reference does not aid in the resource estimation of the Farrell '493 reference, and that adjusting the estimate resources for temperature increases is not taught or suggested by either reference.

The Examiner states that the Farrell '493 reference and the Weichmann reference are

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analogous art "because they are from the similar problem solving area of printer management", and that the motivation for combining these references is "to adjust for temperature increases" (Office Action, p.14). Applicants disagree. Applicants contend that the alleged art area of "printer management" is too broad and vague to serve as a basis for allowing the references to be properly combined. The Weichmann reference is not directed to the estimation of consumables resources for a print job. Rather, it is directed to selection of an appropriate color profile used to RIP a print job for a particular printing machine (Figs. 1-3). Because the Weichmann reference does not aid in the resource estimation of the Farrell '493 reference, the references are not properly combinable.

In addition, the alleged motivation to adjust the estimation process for temperature increases impermissibly uses the Applicants' disclosure as a blueprint or in hindsight for the rejection. As just discussed, the Weichmann reference is not even directed to estimation of consumable resources, but rather to the selection of a particular color profile, from a group of color profiles, to be used to translate the data from one color space to another as part of the RIP process. To whatever extent, if any, that the selection of the color space may be based on temperature, there is no disclosure in the Weichmann reference that an estimate of consumable resources for a print job is based on printhead temperature. Because it is only in Applicants' disclosure that such a disclosure can be found, the reason provided by the Examiner lacks the articulated reasoning with some rational underpinning required to validly combine the teachings of the Farrell '493 and Weichmann references and support the legal conclusion of obviousness.

B. Claim 32 was improperly rejected under 35 USC §103(a), as being unpatentable over U.S. patent 6,266,493 to Farrell et al. ("Farrell '493") in view of U.S. patent 6,580,524 to Weichmann et al. ("Weichmann").

1. The rejection of dependent claim 32 is improper in that the limitation of "the estimating including adjusting the required amount of the consumables based on the printhead temperature" is neither taught nor

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suggested by the Farrell '493 and Weichmann references

With regard to printhead temperature, claim 32 recites:

"32. (Previously presented) The method of claim 31, wherein the printhead temperature affects ink usage, the estimating including adjusting the required amount of the consumables based on the printhead temperature." (emphasis added)

The Examiner admits that the Farrell '493 reference does not disclose the limitation that "the estimating including adjusting the required amount of the consumables based on the printhead temperature" (Office Action, p.14). However, the Examiner contends that the Weichmann reference teaches this limitation. Applicants disagree. As discussed heretofore with regard to claim 31, the Weichmann reference is directed to the selection of an appropriate color profile, from a group of color profiles, usable to translate the data from one color space to another as part of the RIP process of a print job for a particular printing machine (Figs. 1-3). The Weichmann reference is not at all directed to the estimation of consumable resources. It necessarily follows, therefore, that since the Weichmann reference is not directed to estimation, it cannot teach that the estimation includes adjusting the required amount of the consumables based on the printhead temperature.

Therefore, the features of the present invention are neither disclosed nor suggested by the Farrell '493 reference in combination with the Weichmann reference in that the combined references do not teach or suggest this limitation.

2. The rejection of dependent claim 32 is improper for the same reasons that render the rejection of its base claim 29 and parent claim 31 improper.

Claim 32 depends from parent claim 31, and from base claim 29.

Applicants have presented heretofore the reasons why the rejections of base claim 29 and parent claim 31 are improper. Because the rejection of these claims is improper, the rejection of their dependent claim 32 is also improper for at least the same reasons.

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Claim 38 has been rejected under 35 USC §103(a), as being unpatentable over U.S. patent 6,266,493 to Farrell et al. ("Farrell '493") in view of U.S. patent 6,356,359 to Motamed ("Motamed").

A. Claim 38 was improperly rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,266,493 to Farrell et al. ("Farrell '493") in view of U.S. patent 6,356,359 to Motamed ("Motamed").

1. The rejection of dependent claim 38 is improper for the same reasons that render the rejection of its base claim 29 improper.

Claim 38 depends from base claim 29, which was rejected under 102(e) based on the Farrell '493 reference. The Motamed reference was not cited in the rejection of claim 29.

Applicants have presented heretofore the reasons why the rejection of base claim 29 is improper. Because the rejection of base claim 29 is improper, the rejection of its dependent claim 38 is also improper for at least the same reasons.

2. There is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness in that the stated motivation to improve the estimation capability of the Farrell '493 reference for a plurality of machines is not pertinent to the claimed invention.

The Examiner states that the motivation for combining the Farrell '493 and Motamed references is "to improve the capability of estimation for a plurality of machines" (Office Action, p.16). This alleged motivation has nothing to do with the subject matter of claim 38, which recites:

"38. (Previously presented) The method of claim 29, comprising:
based on the print job parameters, estimating at the second computer a cost of the consumables required to print the print job, and communicating the cost to the first computer"

Both the second computer and the first computer are recited in base claim 29, against which the Motamed reference has not been cited. Furthermore, it is believed that the element "plurality of

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machines" refers to printers, not computers, and neither base claim 29 nor claim 38 recite a plurality of printers. Therefore, the stated motivation is too vague and not specific enough to serve as a motivation for combining the references. In addition, the stated motivation impermissibly uses the Applicant's disclosure as a blueprint or in hindsight for the rejection. Because the reason provided by the Examiner lacks the articulated reasoning with some rational underpinning that is required to support the legal conclusion of obviousness, it is improper to combine the Motamed reference with the Farrell '493 reference.

Conclusion

Applicants contend that claims 29-30 and 34-37 were improperly rejected because the applied reference does not disclose all of Applicants' claim limitations.

Applicants contend that claims 1-14, 21-28, 31-33, and 38 were improperly rejected because the applied references, alone or in combination, do not teach or suggest all of Applicants' claim limitations, and there is no reasonable expectation of success in combining the references.

Each of these reasons alone distinguishes Applicants' claims from the cited reference or references, and renders Applicants' claims patentable in light of the cited reference or references.

Attorney for Applicants has reviewed each one of the cited references made of record and not relied upon, and believes that the claims presently on file in the subject application patentably distinguish thereover, either taken alone or in combination with one another.

Therefore, all claims presently on file in the subject application are in condition for immediate allowance, and such action is respectfully requested. If it is felt for any reason that direct communication with Applicant's attorney would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned Robert C. Sismilich, Esq. at the below-listed telephone number.

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**AUTHORIZATION TO PAY AND PETITION
FOR THE ACCEPTANCE OF ANY NECESSARY FEES**

If any charges or fees must be paid in connection with the foregoing communication (including but not limited to the payment of an extension fee or issue fees), or if any overpayment is to be refunded in connection with the above-identified application, any such charges or fees, or any such overpayment, may be respectively paid out of, or into, the Deposit Account No. 08-2025 of Hewlett-Packard Company. If any such payment also requires Petition or Extension Request, please construe this authorization to pay as the necessary Petition or Request which is required to accompany the payment.

Respectfully submitted,



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